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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/694,880	10/24/2000	Eric Cheung	2000-0092	2454

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EXAMINER

PHAN, MAN U

ART UNIT	PAPER NUMBER
2665	6

DATE MAILED: 08/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/694,880

Applicant(s)

CHEUNG ET AL.

Examiner

Man Phan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment and Argument

1. This communication is in response to applicant's 05/20/2004 Amendment in the application of Cheung et al. for a "Method and system for providing communication control functionality at a remotely located site using a distributed feature architecture" filed 10/24/2000. The amendment, response has been entered and made of record. Claims 1 & 18 have been amended. Claims 1-27 are pending in the present application.

The corrected or substitute drawings were received on 02520/2004. These drawings have been approved by the examiner.

2. Applicant's argument to the rejected claims are insufficient to distinguish the claimed invention from the cited prior arts or overcome the rejection of said claims under 35 U.S.C. 103 as discussed below. Applicant's argument with respect to the pending claims have been fully considered, but they are not persuasive for at least the following reasons.

3. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

4. Applicant asserts that there is no motivation to combine the references i.e., Foladare et al., and Isidoro et al., as proposed in the Office Action. In response, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Foladare et al. (US#6,049,602) applied herein for the teaching of a call center functionality at a remotely located representative using data network. In the same field of endeavor, Isidoro et al. (US#5,384,771) teaches the object-oriented commands for establishing complex call and connection configurations.

5. Applicant's argument with respect to the rejected claims of record (page 5, second paragraph) that the cited references only teaches "*to establish connection configurations*", and do not teach or suggest the "capabilities to download or communicate data". However, Isidoro et al. (US#5,384,771) discloses in Figs. 1 & 2 block circuit diagrams illustrated a multimedia call configuration system which allow subscribers to simultaneously exchange of audio, video, and/or digital data (such connections may be classified as "broadband/multimedia"). In Fig. 1, the control signals are passed between SCP 101, SSP 102, SSP 103 and SSP 104 via signaling paths 108, 109, 110 and 111 (shown as dotted lines). In response to these signals, the SSPs reconfigure the telecommunication network to create a specific call topology (*feature modules as*

defined by applicant) and achieve the desired subscriber-to-subscriber connections via transport paths 112, 113, 114, 115 and 116 (shown as bold solid lines). These transport paths may be adapted to facilitate voice, data, and/or video communication between the network subscribers. The network subscriber utilizing SPE 105 initiates the call by sending a call topology request to setup a call to SSP 102. SSP 102 then sends the topology request to SCP 101 via signaling paths 108 and 109 (automatic transmission of such requests from an SSP to an SCP is typical within intelligent public telecommunication networks). Upon receipt of the topology request, SCP 101 generates a high-level call control message which contains information as to the identity of the parties to be included in the call, and a request for a particular CL-C which defines the association between the parties to be involved in a call (for this example, the CL-C designated CL-C.sub.2 is being requested). This high-level call control message is then transmitted to requesting SSP 102 via signaling paths 108 and 109. As shown in Fig. 2, SSP 102 includes call/connection processor 201, CL-C memory 202, CN-C memory 203, and switch fabric 204. Control messages received by SSP 102 via signaling path 109 are processed and ultimately passed to switch fabric 204, thereby controlling the connectivity provided by switch fabric 204. Program-controlled electronic switching systems such as SSP 102 are known and commercially available. Upon receipt of the high-level call control message from SCP 101, call/connection processor 201 within SSP 102 recalls CL-C.sub.2 (the requested CL-C) from CL-C memory 202, and executes the instructions contained therein (*communicating the data records*). CL-C memory 202 is a storage area containing a number of pre-programmed software modules designated CL-C.sub.1 through CL-C.sub.n --each of which defines a specific CL-C. Software module CL-C.sub.2 causes call/connection processor 201 to send a message to SSP 103 and a message to

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SSP 104 (via signaling paths 109, 110, and 111) (Col. 3, lines 45 plus). Applicant asserts that the predefined configurations taught in Foladare are not the features modules as in the manner claimed. However, Foladare discloses a virtual call center wherein remotely located customer service representatives are provided with full call center functionality via data network (*telecommuting network*). A data communications link is established over a data network between the call control server and the CSR station computer. The call control server sends a call control page (e.g., a Web page or a Telnet page) to the station computer. The call control page includes one or more selectable call control commands (e.g., hold, transfer, terminate, conference) and telephone digits. The CSR can actuate or click on one or more of the call control commands to remotely control incoming telephone calls via the data network. A signal corresponding to the actuated command is sent from the station computer to the switch via the call control server to control the call. In this manner, a data network can be employed to provide remote call center functionality to the CSR without the necessity of expensive digital telephone equipment and digital telephone lines. In addition, a merchant server can provide a merchant application page to the station computer to allow the CSR to process the received call (Fig.1; Col. 2, lines 10 plus). Therefore, the Examiner maintains that the references cited and applied in the last office actions are maintained for this office action.

Claim Objections

6. Claim 1 is objected to because of the following informalities:

The claims contain the phrase "capable of". It has been held that the recitation that an element is "capable of" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138. Appropriate correction is required.

Claim Rejections - 35 USC ' 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 2, 5, 9, 10, 12, 18, 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foladare et al. (US#6,049,602) in view of Isidoro et al. (US#5,384,771).

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

With respect to claims 1-2, Foladare discloses a method of supporting remote workers utilizing virtual call center functionality at a remotely located subscriber, comprising the steps of: creating an authentication for receiving login information from at least one communication device associated with the user (Col. 1, line 53 – Col. 2, line 7; Col. 9, lines 46-58), the authentication determining if the at least one communication device will have access to communication control functions residing in the communication network (Col. 1, lines 55-62; Col. 5, lines 7-64; Col. 9, line 58 – Col. 10, line 16); and upon login, creating one or more applications, each application being capable of performing a particular communication control functionality for the at least one communication device (Col. 2, lines 10-27; Col. 5, line 56 – Col. 6, line 2); one or more applications also being able to download data records from the operational database and communicating the data records to the at least one communication device (Col. 2, lines 12-27; Col. 3, line 55 – Col. 4, line 16; Col. 4, lines 49-67; Col. 5, line 61-64; Col. 6, lines 49 – Col. 7, line 25; Col. 8, line 43 – Col. 9, line 45).

Regarding claim 5, Foladare teaches the limitation wherein each communication control functionality corresponding to specific communication features based on requests received from the at least one communication device (Col. 5, lines 5-27).

Regarding claim 9, Foladare teaches the limitation further comprising the steps of receiving an incoming call intended for the at least one communication device associated with the enhanced network user, and connecting the incoming call to the at least one communication device associated with the enhanced network user (Col. 10, line 64 – Col. 11, line 13).

Regarding claim 10, 22, Foladare teaches the limitation further comprising the steps of receiving a communication from the at least one communication device requesting that the incoming call be placed on hold; placing the call on hold, and transferring the incoming call to the on hold condition (Col. 12, lines 17-21).

Regarding claims 12, 24, Foladare teaches the limitation further comprising the steps of receiving a communication from the at least one communication device requesting that the incoming call be transferred to another communication device not associated with the enhanced network user; transferring the incoming call to the communication device not associated with the enhanced network user (Col. 9, lines 34-45).

Regarding claim 18, Foladare teaches the limitation the method comprising receiving communication request to connect to a communication device logged onto the distributed feature network; determining the type of communication requested by the third party device; determining the availability of those communication devices able to respond to the type of communication being requested by the third party device; routing the communication to an available communication device able to respond to the type of communication being requested; forwarding to the available communication device information from the operational database relating to the third party associated with the third party device that originated the communication; and providing communication control functionality required by the available communication devices so the available communication device is able to interact with the third party device (Col. 5, line 7 – Col. 9, line 45).

However, Foladare does not disclose the aspects of the feature boxes. In the same field of endeavor, Isidoro et al. teaches the creation of feature modules using object-oriented

commands to implement complex call and connection configuration in a distributed manner (See Fig. 2; Col. 2, lines 51-59; Col. 3, lines 4-66).

Regarding claim 5, Isodoro teaches the limitation wherein access to the communication control functions further comprises the step of the enhanced network user being connected through signaling and media channels to other feature boxes, and record in the operational database necessary for the other feature boxes to function (Fig. 2; Col. 3, lines 4-66).

One skilled in the art of communications would recognize the advantage of using a feature box in distributed feature network, and would apply Isodoro's novel use of feature boxes in distributed feature network into Foladare's call center functionality at a remotely located utilizing data network. Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to apply Isodoro's multimedia call configuration system into Foladare's virtual call center with the motivation being to provide a distributed mechanism to accurately assemble and make available complex network features, applications for remote call center operation.

Regarding claim 3, Foladare teaches the limitation wherein communication control functionality includes processing of voice and data communications (Col. 2, lines 58-65).

Regarding claim 4, Foladare teaches the limitation wherein the communication control functionality includes processing of multimedia communications (voice via the telephone, and data/image via web/merchant and call control pages available to the agent. Col. 10, line 64 – Col. 12, line 37).

Regarding claim 6, Foladare teaches the limitation wherein the communication control functionality includes conferencing capabilities (Col. 2, lines 14-16).

Regarding claim 7, Foladare teaches the limitation wherein the communication control functionality includes transferring capabilities (Col. 2, lines 14-16).

Regarding claim 8, Foladare teaches the limitation wherein the communication device is a computer (Col. 2; lines 10-21).

9. Claims 11, 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foladare et al. (US#6,049,602) in view of Bateman et al. (US#5,384,771).

Regarding claims 11, 23, foladare teaches that all features are made available to the remote agent (Col. 1; lines 51-59).

Regarding claim 20, Foladare teaches the web page is selected based on communication request (Col. 11, lines 4-13)

However, Foladare does not explicitly disclose the features include voice mail and the use of URL for customer requests. In the same field of endeavor, bateman discloses the use of voicemail (Col. 7, lines 39-45) and URLs for customer requests (Col. 8, line 66 – Col. 9, line 2).

One skilled in the art would have recognized the need for effectively and efficiently providing control functionality to communication services utilizing voicemail and customer request using URLs, and would have applied Bateman's teaching of the accessing remote information network services utlizing voicemail and URL feature into Foladare's novel use of the techniques for a call center functionality at a remotely located utilizing data network. Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to apply Bateman's method and system for coordinating data and voice communications via customer contact channel changing system over IP into Foladare's virtual

call center with the motivation being to provide a method and system for a distributed mechanism to improve services, providing customers the option to use voicemail and URLs to facilitate interactions with a remote customer service agent.

Regarding claims 13, 25, Foladare teaches the limitation further comprising the steps of forwarding one or more data records from the operational database to the at least one communication device associated with the enhanced network user, and one or more data records containing information pertaining to the incoming call (Col. 8, lines 56-65).

Regarding claims 14, 26, Foladare teaches the limitation further comprising the steps of forwarding a data record from the database to the at least one communication device associated with the enhanced network user, and the data record containing customer record information relating to the customer associated with the incoming call (Col. 8; lines 56-65).

Regarding claims 15, 27, Foladare teaches the limitation further comprising the steps of forwarding a data record from the database to the at least one communication device associated with the enhanced network user, and the data record containing order forms to be completed by the enhanced network user (Col. 8, lines 56-65).

Regarding claim 19, Foladare teaches the limitation wherein the communication request is a telephone number (Col. 9, lines 7-11).

Regarding claim 21, Foladare teaches the limitation wherein the steps of determining the availability of a communication device further comprises the steps of determining which communication device are associated with agents that are logged onto the distributed feature network; determining which of the communication devices associated with logged in agents are

available to receive communications; and forwarding the communication to an available communication device associated with a logged in agent (Col. 5, line 7 – Col. 8, line 30).

10. Claims 16, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foladare et al. (US#6,049,602).

With respect to claims 16 & 17, Foladare discloses the claimed limitations as discussed in paragraphs above. Foladare differs from the claims in that Foladare does not teaches the limitation wherein the distributed feature communication network is a broadband network as required in claim 16, or a cable network as required in claim 17. However, Examiner takes Official Notice that the reliance on a commonly known standard such as the use of DSL modem or cable modem for the remote workplace in the manner claimed would have been obvious to the artisan as a matter of the design choice, and the utilizing of these modems in telecommuting is considered well known in the art to provide broadband service over standard phone lines and cable network respectively.

One skilled in the art would have recognized the need for effectively and efficiently providing control functionality to communication services utilizing a DSL modem or cable modem for the remote workplace, and would have applied the DSL or cable modem features into Foladare's novel use of the techniques for a call center functionality at a remotely located utilizing data network. Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to apply DSL or cable modem into Foladare's virtual call center with the motivation being to provide a method and system for a distributed

mechanism to improve the response time associated with the remote work applications for the remote user over the network.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cheung et al. (US#6,456,711) discloses a method for placing a call intended for an enhanced network user on hold while the enhanced network user is unavailable to take the call using a distributed feature architecture.

Jackson et al. (US# 6,160,883) discloses a telecommunications network system and method

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION THIS ACTION IS MADE FINAL**. See MPEP ' 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

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will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

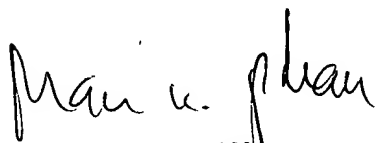
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Phan whose telephone number is (703)305-1029. The examiner can normally be reached on Mon - Fri from 6:30 to 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached on (703) 308-6602. The fax phone number for the organization where this application or proceeding is assigned is (703)305-3988.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Mphan

08/02/2004.


MAN PHAN
PATENT EXAMINER